

FIG. 1

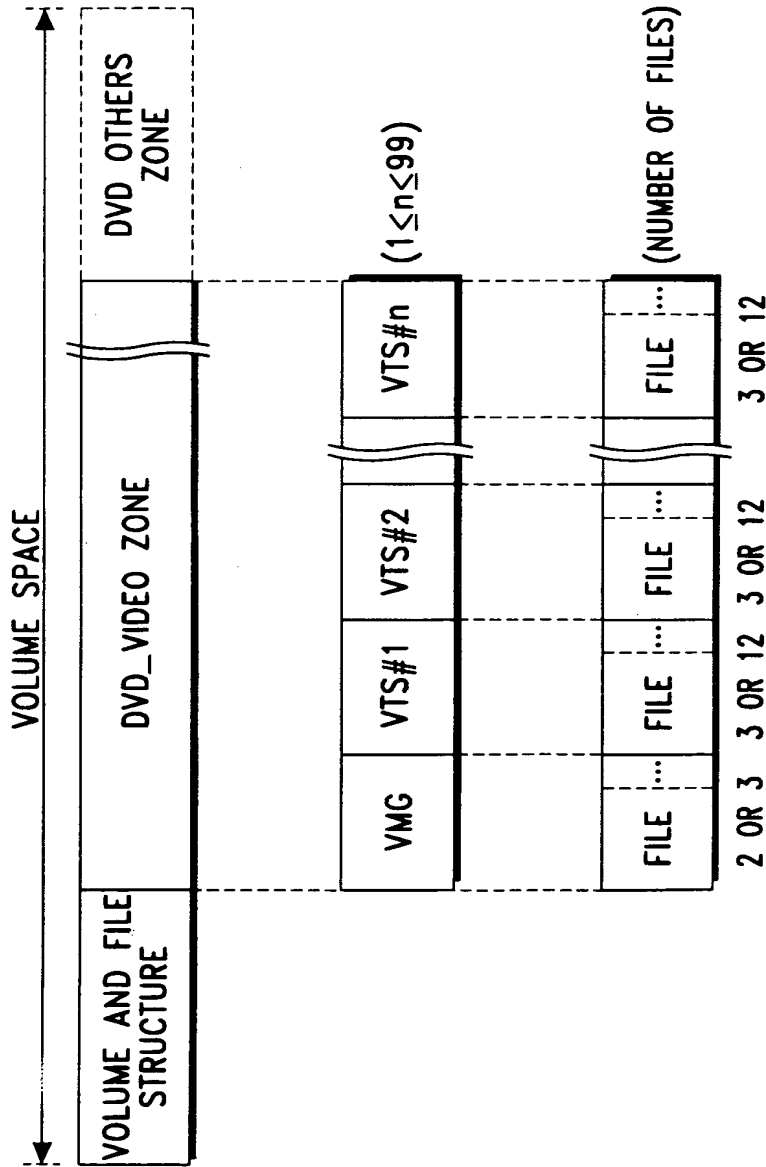


FIG. 2



FIG. 3

VIDEO MANAGER INFORMATION (VMGI)	VIDEO MANAGER INFORMATION MANAGEMENT TABLE (VMGI_MAT)
VIDEO OBJECT SET FOR VIDEO MANAGER MENU (VMGM_VOBS)	TITLE SEARCH POINTER TABLE (TT_SRPT)
BACK UP OF VIDEO MANAGER INFORMATION (VMGI_BUP)	VIDEO MANAGER MENU PGC1 UNIT TABLE (VMGM_PGC1_UT)
	PARENTAL MANAGEMENT INFORMATION TABLE (PTL_MAINT)
	VIDEO TITLE SET ATTRIBUTE TABLE (VTS_ATTRT)
	TEXT DATA MANAGER (TXTDT_MG)
	VIDEO MANAGER MENU CELL ADDRESS TABLE (VMGM_C_ADT)
	VIDEO MANAGER MENU VIDEO OBJECT UNIT ADDRESS MAP (VMGM_VOBJU_ADMAP)

FIG. 4

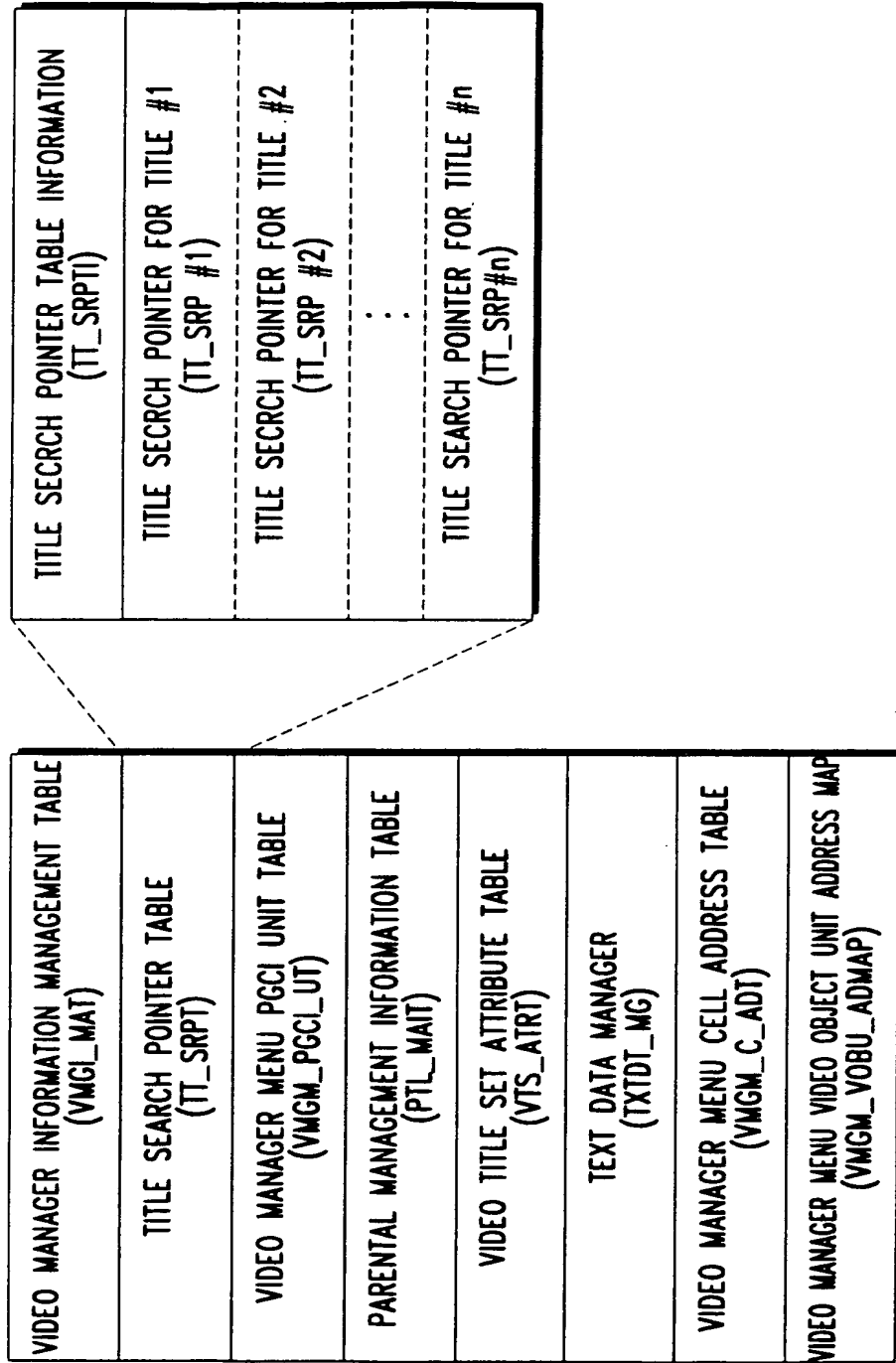


FIG. 5

FIG. 6

FIG. 6

## VTSI\_MAT

RBP		CONTENTS	NUMBER OF BYTES
0 TO 11	VTS_ID	VTS IDENTIFIER	12BYTES
12 TO 15	VTS_EA	END ADDRESS OF VTS	4BYTES
16 TO 27	RESERVED	RESERVED	12BYTES
28 TO 31	VTSI_EA	END ADDRESS OF VTSI	4BYTES
32 TO 33	VERN	VERSION NUMBER OF DVD VIDEO SPECIFICATION	2BYTES
34 TO 37	VTS_CAT	VTS CATEGORY	90BYTES
38 TO 127	RESERVED	RESERVED	4BYTES
128 TO 131	VTSI_MAT_EA	END ADDRESS OF VTSI_MAT	60BYTES
132 TO 191	RESERVED	RESERVED	4BYTES
192 TO 195	VTSM_VOBS_SA	START ADDRESS OF VTSM_VOBS	4BYTES
196 TO 199	VTSTT_VOBS_SA	START ADDRESS OF VTSTT_VOBS	4BYTES
200 TO 203	VTS_PTT_SRPT_SA	START ADDRESS OF VTS_PTT_SRPT	4BYTES
204 TO 207	VTS_PGCIT_SA	START ADDRESS OF VTS_PGCIT	4BYTES
208 TO 211	VTSM_PGCI_UT_SA	START ADDRESS OF VTSM_PGCI_UT	4BYTES
212 TO 215	VTS_TMAPT_SA	START ADDRESS OF VTS_TMAPT	4BYTES
216 TO 219	VTSM_C_ADT_SA	START ADDRESS OF VTSM_C_ADT	4BYTES
220 TO 223	VTSM_VOBU_ADMAP_SA	START ADDRESS OF VTSTT_VOBU_ADMAP	4BYTES
224 TO 227	VTS_C_ADT_SA	START ADDRESS OF VTS_C_ADT	4BYTES
228 TO 231	VTS_VOBU_ADMAP_SA	START ADDRESS OF VTS_VOBU_ADMAP	4BYTES
232 TO 255	RESERVED	RESERVED	24BYTES
256 TO 257	VTSM_V_ATR	VIDEO ATTRIBUTE OF VTSM	2BYTES
258 TO 259	VTSM_AST_Ns	NUMBER OF AUDIO STREAMS OF VTSM	2BYTES
260 TO 267	VTSM_AST_ATR	AUDIO STREAM ATTRIBUTE OF VTSM	8BYTES
268 TO 323	RESERVED	RESERVED	56BYTES
324 TO 339	RESERVED	RESERVED	16BYTES
340 TO 341	VTSM_SPST_Ns	NUMBER OF SUB-PICTURE STREAMS OF VTSM	2BYTES
342 TO 347	VTSM_SPST_ATR	SUB-PICTURE STREAMS ATTRIBUTE TABLE OF VTSM	6BYTES
348 TO 511	RESERVED	RESERVED	164BYTES
512 TO 513	VTS_V_ATR	VIDEO ATTRIBUTE OF VTS	2BYTES
514 TO 515	VTS_AST_Ns	NUMBER OF AUDIO STREAMS OF VTS	2BYTES
516 TO 579	VTS_AST_ATRT	AUDIO STREAM ATTRIBUTE TABLE OF VTS	64BYTES
580 TO 595	RESERVED	RESERVED	16BYTES
596 TO 597	VTS_SPST_Ns	NUMBER OF SUB-PICTURE STREAMS OF VTS	2BYTES
598 TO 789	VTS_SPST_ATRT	SUB-PICTURE STREAMS ATTRIBUTE TABLE OF VTS	192BYTES
790 TO 791	RESERVED	RESERVED	2BYTES
792 TO 983	VTS_MU_AST_ATRT	MULTICHANNEL AUDIO STREAMS ATTRIBUTE TABLE OF VTS	192BYTES
984 TO 1023	RESERVED	RESERVED	40BYTES
1024 TO 2047	RESERVED	RESERVED	1024BYTES

FIG. 7

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## VTS\_AST\_ATRT

RBP	CONTENTS	NUMBER OF BYTES
516 TO 523	VTS_AST_ATR OF AUDIO STREAM #0	8BYTES
524 TO 531	VTS_AST_ATR OF AUDIO STREAM #1	8BYTES
532 TO 539	VTS_AST_ATR OF AUDIO STREAM #2	8BYTES
540 TO 547	VTS_AST_ATR OF AUDIO STREAM #3	8BYTES
548 TO 555	VTS_AST_ATR OF AUDIO STREAM #4	8BYTES
556 TO 563	VTS_AST_ATR OF AUDIO STREAM #5	8BYTES
564 TO 571	VTS_AST_ATR OF AUDIO STREAM #6	8BYTES
572 TO 579	VTS_AST_ATR OF AUDIO STREAM #7	8BYTES

FIG. 8A



## VTS\_AST\_ATR

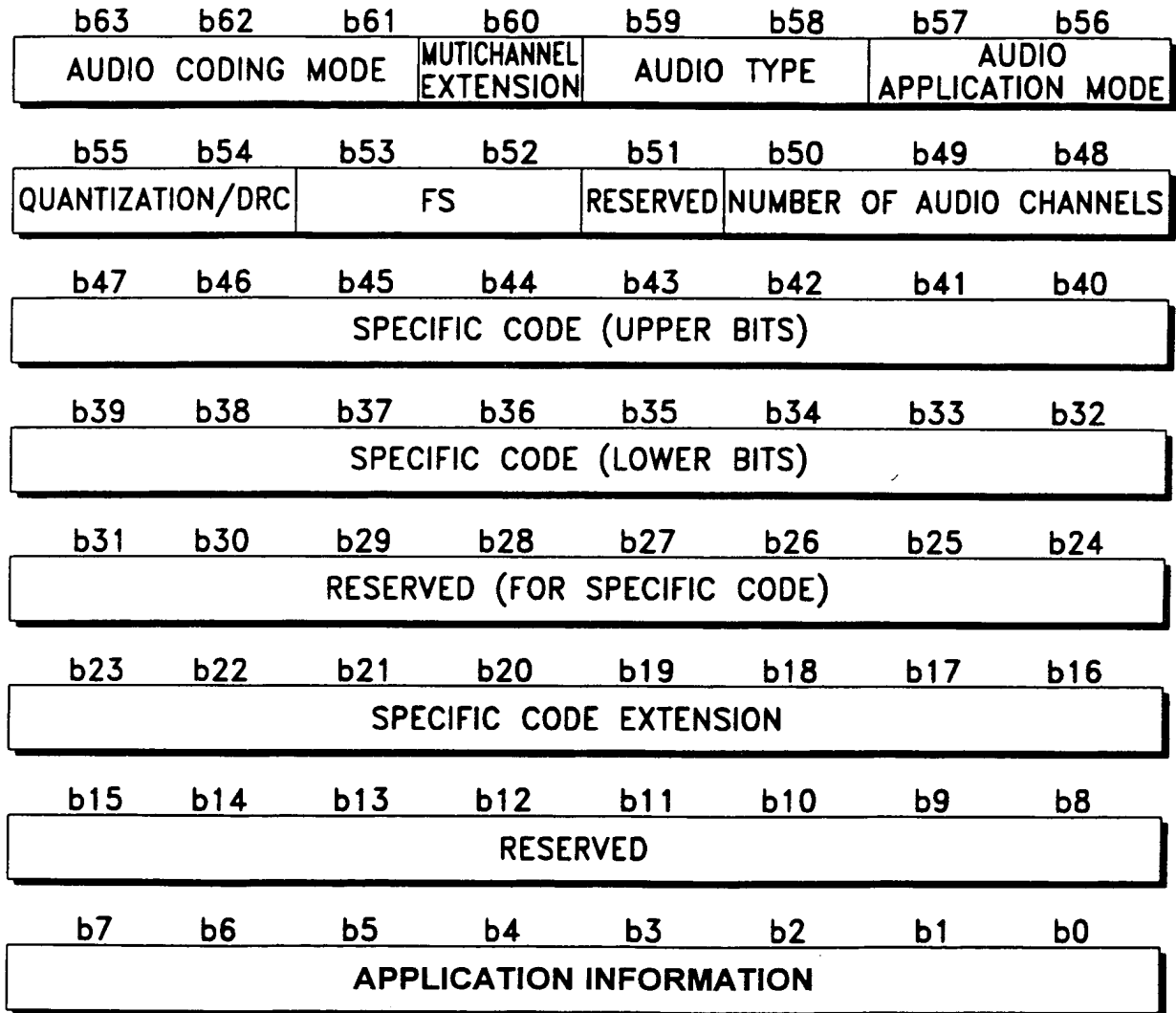


FIG. 8B

RBP	CONTENTS	NUMBER OF BYTES
792 TO 815	VTS_MU_AST_ATR OF AUDIO STREAM #0	24BYTES
816 TO 839	VTS_MU_AST_ATR OF AUDIO STREAM #1	24BYTES
840 TO 863	VTS_MU_AST_ATR OF AUDIO STREAM #2	24BYTES
864 TO 887	VTS_MU_AST_ATR OF AUDIO STREAM #3	24BYTES
888 TO 911	VTS_MU_AST_ATR OF AUDIO STREAM #4	24BYTES
912 TO 935	VTS_MU_AST_ATR OF AUDIO STREAM #5	24BYTES
936 TO 959	VTS_MU_AST_ATR OF AUDIO STREAM #6	24BYTES
960 TO 983	VTS_MU_AST_ATR OF AUDIO STREAM #7	24BYTES
	TOTAL	192BYTES

FIG. 9A

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## VTS\_MU\_AST\_ATR(1)

b191	b190	b189	b188	b187	b186	b185	b184
AUDIO MIXED FLAG		ACH0 MIX MODE		AUDIO CHANNEL CONTENTS			
b183	b182	b181	b180	b179	b178	b177	b176
AUDIO MIXED FLAG		ACH1 MIX MODE		AUDIO CHANNEL CONTENTS			
b175	b174	b173	b172	b171	b170	b169	b168
AUDIO MIXING PHASE		ACH2 MIX MODE		AUDIO CHANNEL CONTENTS			
b167	b166	b165	b164	b163	b162	b161	b160
AUDIO MIXING PHASE		ACH3 MIX MODE		AUDIO CHANNEL CONTENTS			
b159	b158	b157	b156	b155	b154	b153	b152
AUDIO MIXING PHASE		ACH4 MIX MODE		AUDIO CHANNEL CONTENTS			
b151	b150	b149	b148	b147	b146	b145	b144
AUDIO MIXING PHASE		ACH5 MIX MODE		AUDIO CHANNEL CONTENTS			
b143	b142	b141	b140	b139	b138	b137	b136
AUDIO MIXING PHASE		ACH6 MIX MODE		AUDIO CHANNEL CONTENTS			
b135	b134	b133	b132	b131	b130	b129	b128
AUDIO MIXING PHASE		ACH7 MIX MODE		AUDIO CHANNEL CONTENTS			

FIG. 9B

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VTs\_MU\_AST\_ATR(2)

b127	b126	b125	b124	b123	b122	b121	b120
$\alpha_0$							
b119	b118	b117	b116	b115	b114	b113	b112
$\beta_0$							
b111	b110	b109	b108	b107	b106	b105	b104
$\alpha_1$							
b103	b102	b101	b100	b99	b98	b97	b96
$\beta_1$							
b95	b94	b93	b92	b91	b90	b89	b88
$\alpha_2$							
b87	b86	b85	b84	b83	b82	b81	b80
$\beta_2$							
b79	b78	b77	b76	b75	b74	b73	b72
$\alpha_3$							
b71	b70	b69	b68	b67	b66	b65	b64
$\beta_3$							
b63	b62	b61	b60	b59	b58	b57	b56
$\alpha_4$							
b55	b54	b53	b52	b51	b50	b49	b48
$\beta_4$							

FIG. 9C

b47	b46	b45	b44	b43	b42	b41	b40
$\alpha_5$							
b39	b38	b37	b36	b35	b34	b33	b32
$\beta_5$							
b31	b30	b29	b28	b27	b26	b25	b24
$\alpha_6$							
b23	b22	b21	b20	b19	b18	b17	b16
$\beta_6$							
b15	b4	b13	b12	b11	b10	b9	b8
$\alpha_7$							
b7	b6	b5	b4	b3	b2	b1	b0
$\beta_7$							

FIG. 9D

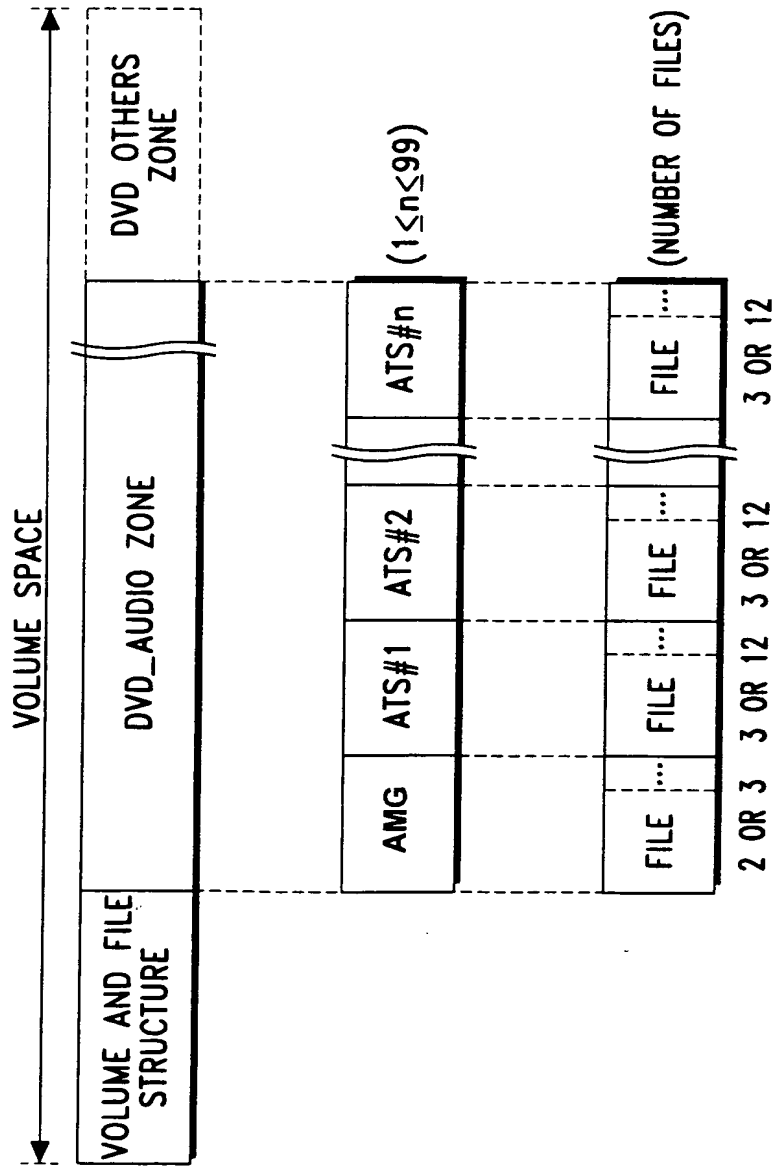
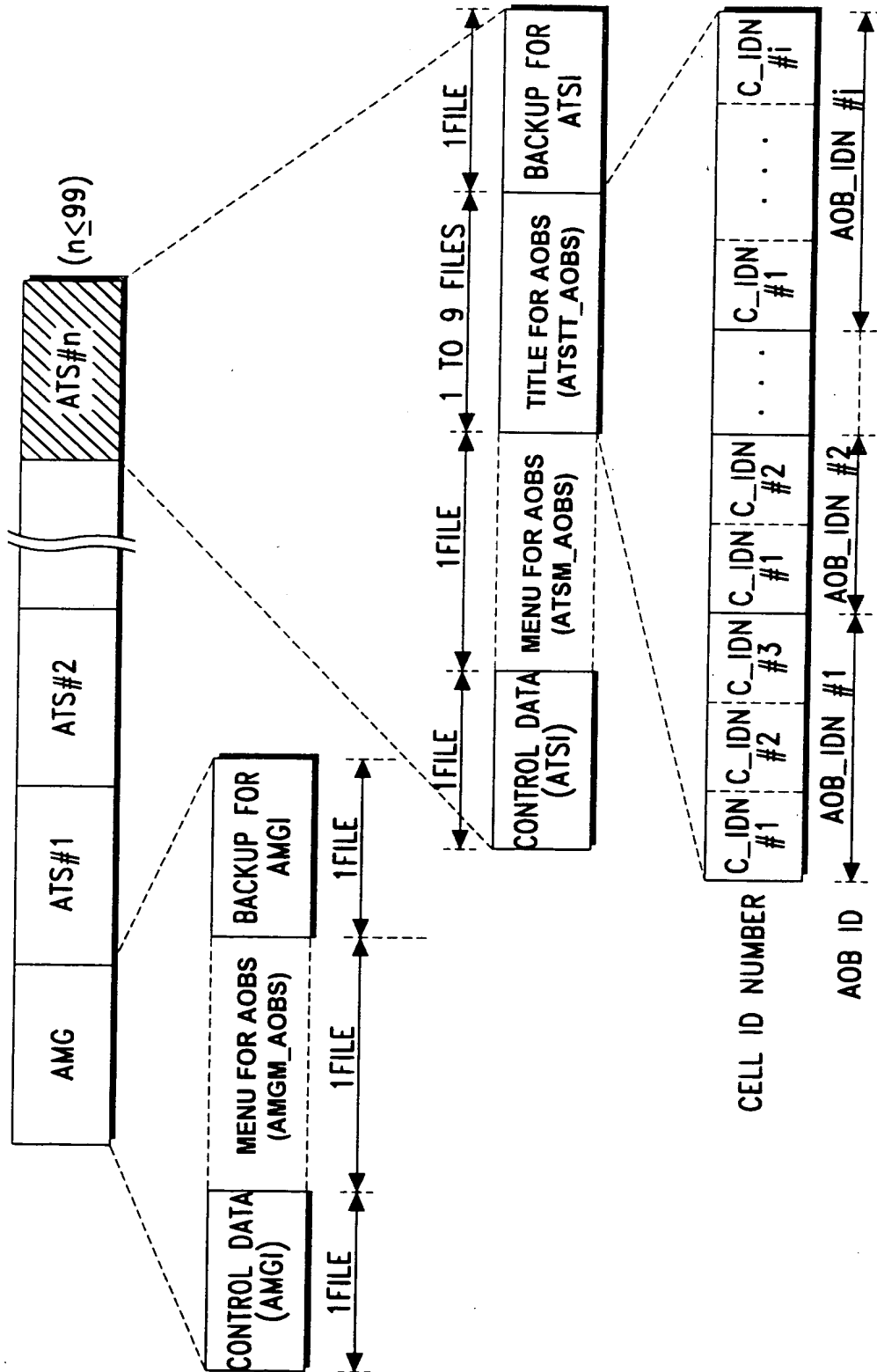


FIG. 10



C\_IDN#: CELL NUMBER WITHIN AN AOBS  
AOB\_IDN#: AOB ID NUMBER WITHIN AN AOBS

FIG. 11





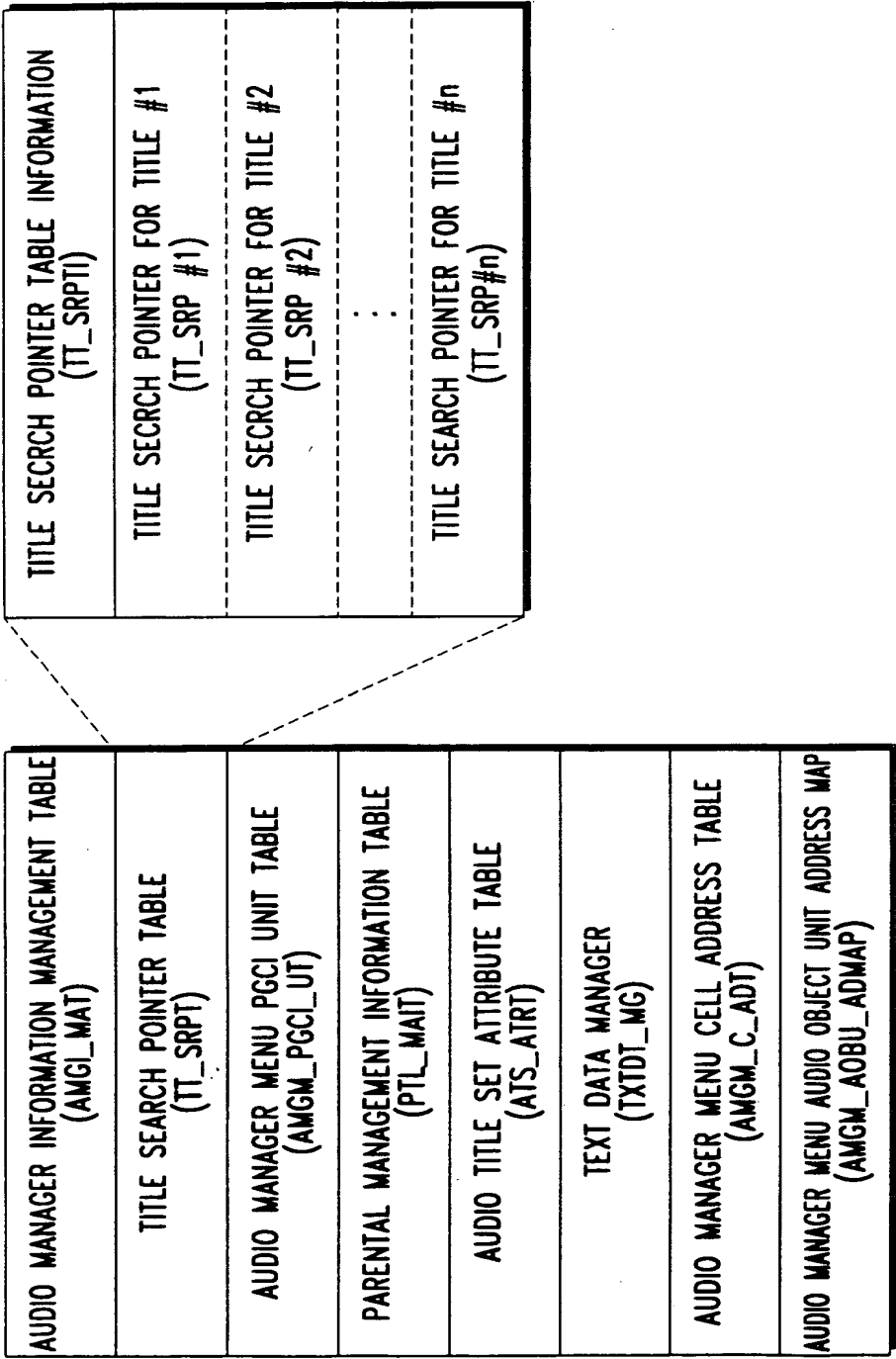


FIG. 13

AUDIO TITLE SET INFORMATION (ATSI)	AUDIO TITLE SET INFORMATION MANAGEMENT TABLE (ATSI_MAT)
AUDIO OBJECT SET FOR AUDIO TITLE SET MENU (ATSM_AOBS)	AUDIO TITLE SET PART_OF_TITLE SEARCH POINTER TABLE (ATS_PTT_SRPT)
AUDIO OBJECT SET FOR AUDIO TITLE SET TITLE (ATSTT_AOBS)	AUDIO TITLE SET PROGRAM CHAIN INFORMATION TABLE (ATS_PGCI)
BACKUP OF AUDIO TITLE SET INFORMATION (ATSI_BUP)	AUDIO TITLE SET MENU PGCI UNIT TABLE (ATSM_PGCI_UT)
	AUDIO TITLE SET TIME MAP TABLE (ATS_TMPT)
	AUDIO TITLE SET MENU CELL ADDRESS TABLE (ATSM_C_ADT)
	AUDIO TITLE SET MENU AUDIO OBJECT UNIT ADDRESS MAP (ATSM_AOBU_ADMAP)
	AUDIO TITLE SET CELL ADDRESS TABLE (ATS_C_ADT)
	AUDIO TITLE SET AUDIO OBJECT UNIT ADDRESS MAP (ATS_AOBU_ADMAP)

FIG. 14

## ATSI\_MAT

RBP		CONTENTS	NUMBER OF BYTES
0 TO 11	ATS_ID	ATS IDENTIFIER	12BYTES
12 TO 15	ATS_EA	END ADDRESS OF ATS	4BYTES
16 TO 27	RESERVED	RESERVED	12BYTES
28 TO 31	ATSI_EA	END ADDRESS OF ATSI	4BYTES
32 TO 33	VERN	VERSION NUMBER OF DVD VIDEO SPECIFICATION	2BYTES
34 TO 37	ATS_CAT	ATS CATEGORY	90BYTES
38 TO 127	RESERVED	RESERVED	4BYTES
128 TO 131	ATSI_MAT_EA	END ADDRESS OF ATSI_MAT	60BYTES
132 TO 191	RESERVED	RESERVED	4BYTES
192 TO 195	ATSM_VOBS_SA	START ADDRESS OF ATSM_AOBS	4BYTES
196 TO 199	ATSTT_VOBS_SA	START ADDRESS OF ATSTT_AOBS	4BYTES
200 TO 203	ATS_PTT_SRPT_SA	START ADDRESS OF ATS_PTT_SRPT	4BYTES
204 TO 207	ATS_PGCIT_SA	START ADDRESS OF ATS_PGCIT	4BYTES
208 TO 211	ATSM_PGCI_UT_SA	START ADDRESS OF ATSM_PGCI_UT	4BYTES
212 TO 215	ATS_TMAPT_SA	START ADDRESS OF ATS_TMAPT	4BYTES
216 TO 219	ATSM_C_ADT_SA	START ADDRESS OF ATSM_C_ADT	4BYTES
220 TO 223	ATSM_VOBU_ADMAP_SA	START ADDRESS OF ATSTT_AOBU_ADMAP	4BYTES
224 TO 227	ATS_C_ADT_SA	START ADDRESS OF ATS_C_ADT	4BYTES
228 TO 231	ATS_VOBU_ADMAP_SA	START ADDRESS OF ATS_AOBU_ADMAP	4BYTES
232 TO 255	RESERVED	RESERVED	24BYTES
256 TO 257	ATSM_V_ATR	VIDEO ATTRIBUTE OF ATSM	2BYTES
258 TO 259	ATSM_AST_Ns	NUMBER OF AUDIO STREAMS OF ATSM	2BYTES
260 TO 267	ATSM_AST_ATR	AUDIO STREAM ATTRIBUTE OF ATSM	8BYTES
268 TO 323	RESERVED	RESERVED	56BYTES
324 TO 339	RESERVED	RESERVED	16BYTES
340 TO 341	ATSM_SPST_Ns	NUMBER OF SUB-PICTURE STREAMS OF ATSM	2BYTES
342 TO 347	ATSM_SPST_ATR	SUB-PICTURE STREAMS ATTRIBUTE TABLE OF ATSM	6BYTES
348 TO 511	RESERVED	RESERVED	164BYTES
512 TO 513	ATS_V_ATR	VIDEO ATTRIBUTE OF ATS	2BYTES
514 TO 515	ATS_AST_Ns	NUMBER OF AUDIO STREAMS OF ATS	2BYTES
516 TO 579	ATS_AST_ATR	AUDIO STREAM ATTRIBUTE TABLE OF ATS	64BYTES
580 TO 595	RESERVED	RESERVED	16BYTES
596 TO 597	ATS_SPST_Ns	NUMBER OF SUB-PICTURE STREAMS OF ATS	2BYTES
598 TO 789	ATS_SPST_ATRT	SUB-PICTURE STREAMS ATTRIBUTE TABLE OF ATS	192BYTES
790 TO 791	RESERVED	RESERVED	2BYTES
792 TO 1298	ATS_MU_AST_ATRT	MULTICHANNEL AUDIO STREAMS ATTRIBUTE TABLE OF ATS	507BYTES
1299 TO 1299	RESERVED	RESERVED	749BYTES

FIG. 15

## ATSM\_AST\_ATR

b63	b62	b61	b60	b59	b58	b57	b56
AUDIO CODING MODE			RESERVED	RESERVED		RESERVED	
b55	b54	b53	b52	b51	b50	b49	b48
QUANTIZATION/DRC		FS		NUMBER OF AUDIO CHANNELS			
b47	b46	b45	b44	b43	b42	b41	b40
RESERVED							
b39	b38	b37	b36	b35	b34	b33	b32
RESERVED							
b31	b30	b29	b28	b27	b26	b25	b24
RESERVED							
b23	b22	b21	b20	b19	b18	b17	b16
RESERVED							
b15	b14	b13	b12	b11	b10	b9	b8
RESERVED							
b7	b6	b5	b4	b3	b2	b1	b0
RESERVED							

FIG. 16

## ATS\_AST\_ATRT

RBP	CONTENTS	NUMBER OF BYTES
516 TO 523	ATS_AST_ATR OF AUDIO STREAM #0	8BYTES
524 TO 531	ATS_AST_ATR OF AUDIO STREAM #1	8BYTES
532 TO 539	ATS_AST_ATR OF AUDIO STREAM #2	8BYTES
540 TO 547	ATS_AST_ATR OF AUDIO STREAM #3	8BYTES
548 TO 555	ATS_AST_ATR OF AUDIO STREAM #4	8BYTES
556 TO 563	ATS_AST_ATR OF AUDIO STREAM #5	8BYTES
564 TO 571	ATS_AST_ATR OF AUDIO STREAM #6	8BYTES
572 TO 579	ATS_AST_ATR OF AUDIO STREAM #7	8BYTES

FIG. 17A

## ATS\_AST\_ATR

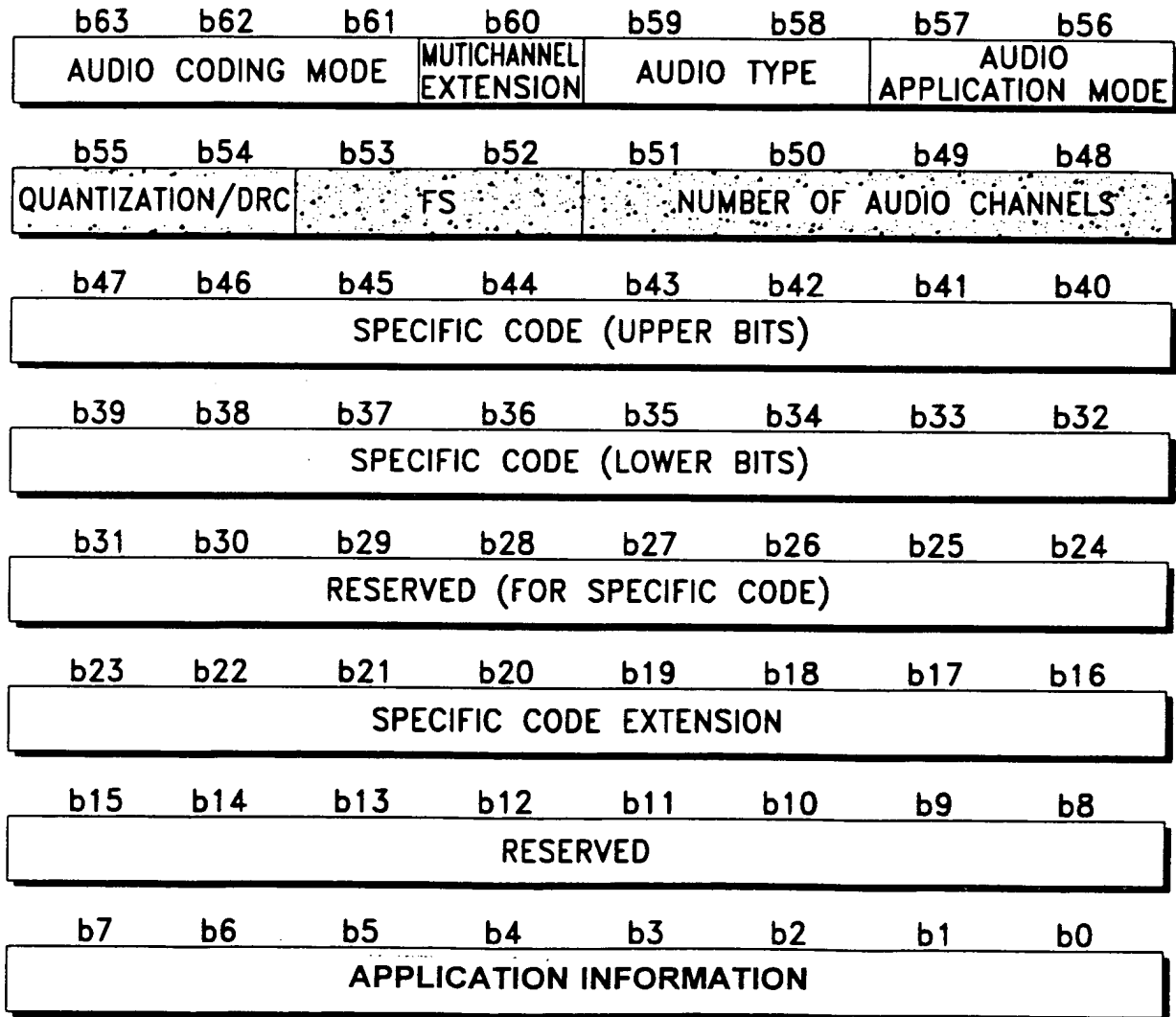


FIG. 17B

RBP	CONTENTS	NUMBER OF BYTES
792 TO 830	ATS_MU_AST_ATR OF AUDIO STREAM #0	39BYTES
831 TO 869	ATS_MU_AST_ATR OF AUDIO STREAM #1	39BYTES
870 TO 908	ATS_MU_AST_ATR OF AUDIO STREAM #2	39BYTES
909 TO 947	ATS_MU_AST_ATR OF AUDIO STREAM #3	39BYTES
948 TO 986	ATS_MU_AST_ATR OF AUDIO STREAM #4	39BYTES
987 TO 1025	ATS_MU_AST_ATR OF AUDIO STREAM #5	39BYTES
1026 TO 1064	ATS_MU_AST_ATR OF AUDIO STREAM #6	39BYTES
1065 TO 1103	ATS_MU_AST_ATR OF AUDIO STREAM #7	39BYTES
1104 TO 1142	ATS_MU_AST_ATR OF AUDIO STREAM #8	39BYTES
1143 TO 1181	ATS_MU_AST_ATR OF AUDIO STREAM #9	39BYTES
1182 TO 1220	ATS_MU_AST_ATR OF AUDIO STREAM #10	39BYTES
1221 TO 1259	ATS_MU_AST_ATR OF AUDIO STREAM #11	39BYTES
1260 TO 1298	ATS_MU_AST_ATR OF AUDIO STREAM #12	39BYTES
	TOTAL	507BYTES

FIG. 18A

## ATS\_MU\_AST\_ATR\_EXT(1)

b39	b38	b37	b36	b35	b34	b33	b32
AUDIO MIXED FLAG		ACH8 MIX MODE		AUDIO CHANNEL CONTENTS			
b31	b30	b29	b28	b27	b26	b25	b24
AUDIO MIXED FLAG		ACH9 MIX MODE		AUDIO CHANNEL CONTENTS			
b23	b22	b21	b20	b19	b18	b17	b16
AUDIO MIXED FLAG		ACH10 MIX MODE		AUDIO CHANNEL CONTENTS			
b15	b14	b13	b12	b11	b10	b9	b8
AUDIO MIXED FLAG		ACH11 MIX MODE		AUDIO CHANNEL CONTENTS			
b7	b6	b5	b4	b3	b2	b1	b0
AUDIO MIXED FLAG		ACH12 MIX MODE		AUDIO CHANNEL CONTENTS			

FIG. 18B



## ATS\_MU\_AST\_ATR\_EXT(2)

b79	b78	b77	b76	b75	b74	b73	b72
$\alpha_8$							
b71	b70	b69	b68	b67	b66	b65	b64
$\beta_8$							
b63	b62	b61	b60	b59	b58	b57	b56
$\alpha_9$							
b55	b54	b53	b52	b51	b50	b49	b48
$\beta_9$							
b47	b46	b45	b44	b43	b42	b41	b40
$\alpha_{10}$							
b39	b38	b37	b36	b35	b34	b33	b32
$\beta_{10}$							
b31	b30	b29	b28	b27	b26	b25	b24
$\alpha_{11}$							
b23	b22	b21	b20	b19	b18	b17	b16
$\beta_{11}$							
b15	b14	b13	b12	b11	b10	b9	b8
$\alpha_{12}$							
b7	b6	b5	b4	b3	b2	b1	b0
$\beta_{12}$							

FIG. 18C

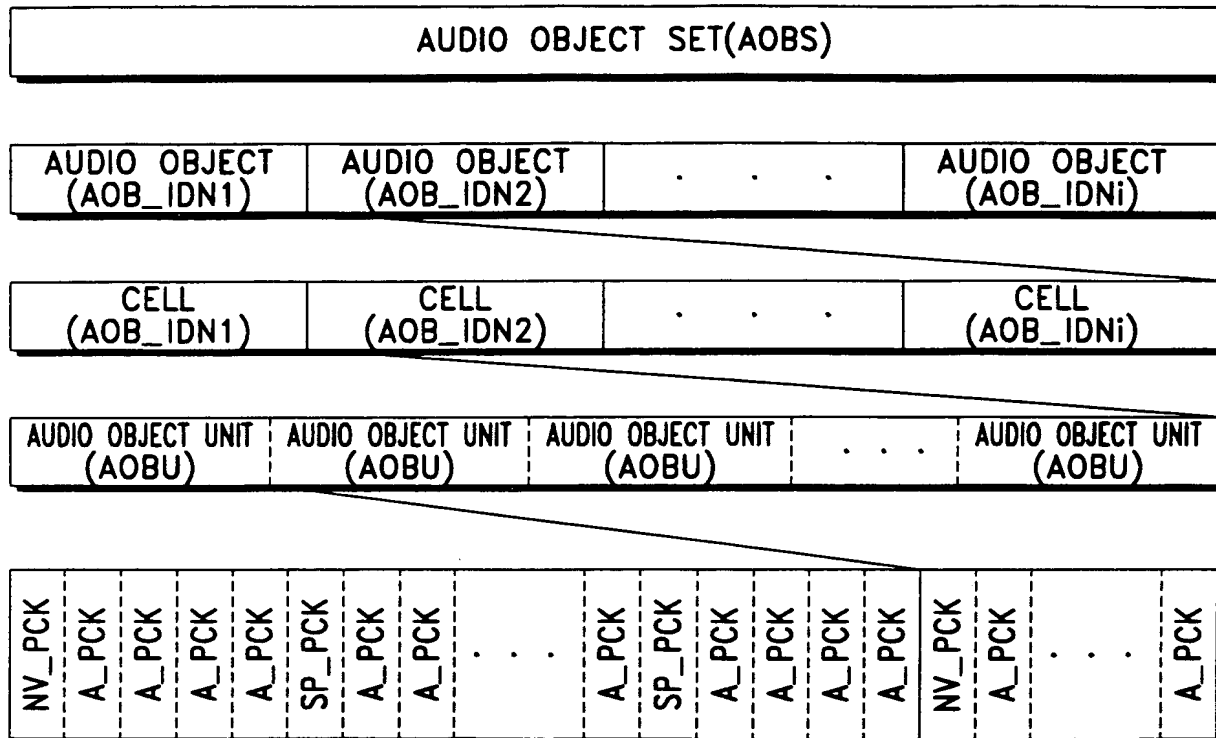


FIG. 19

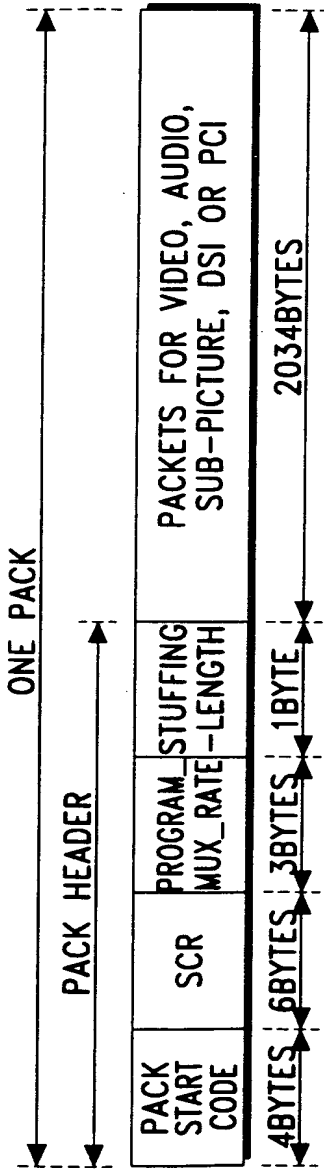


FIG. 20

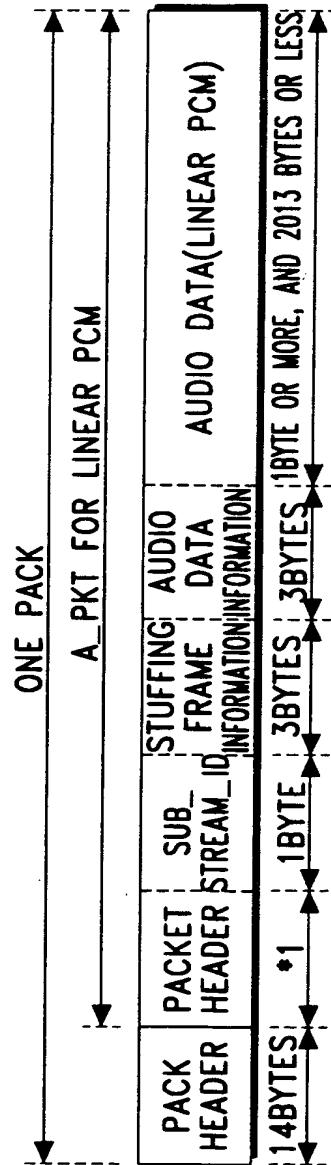


FIG. 21A

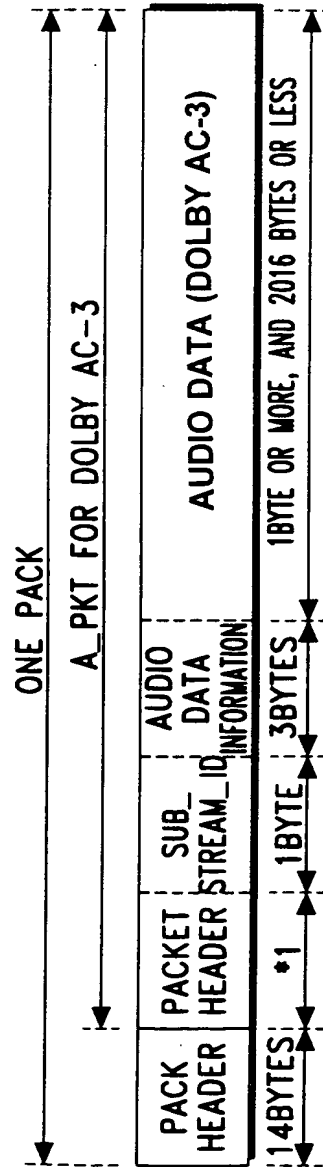


FIG. 21B

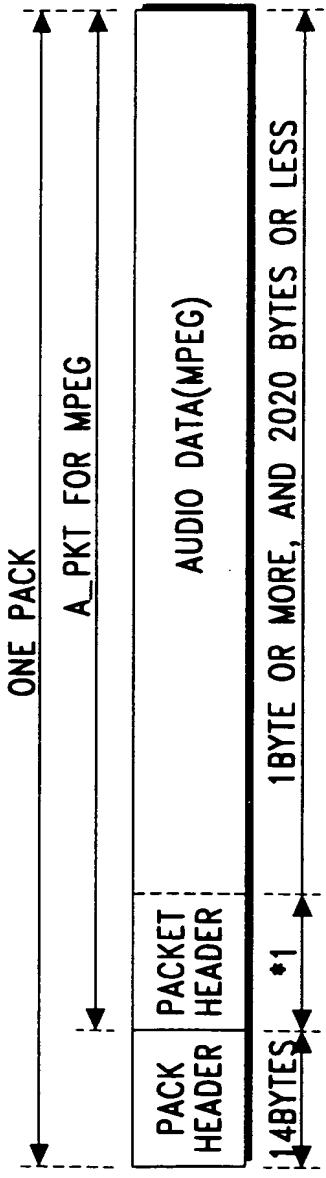


FIG. 21C

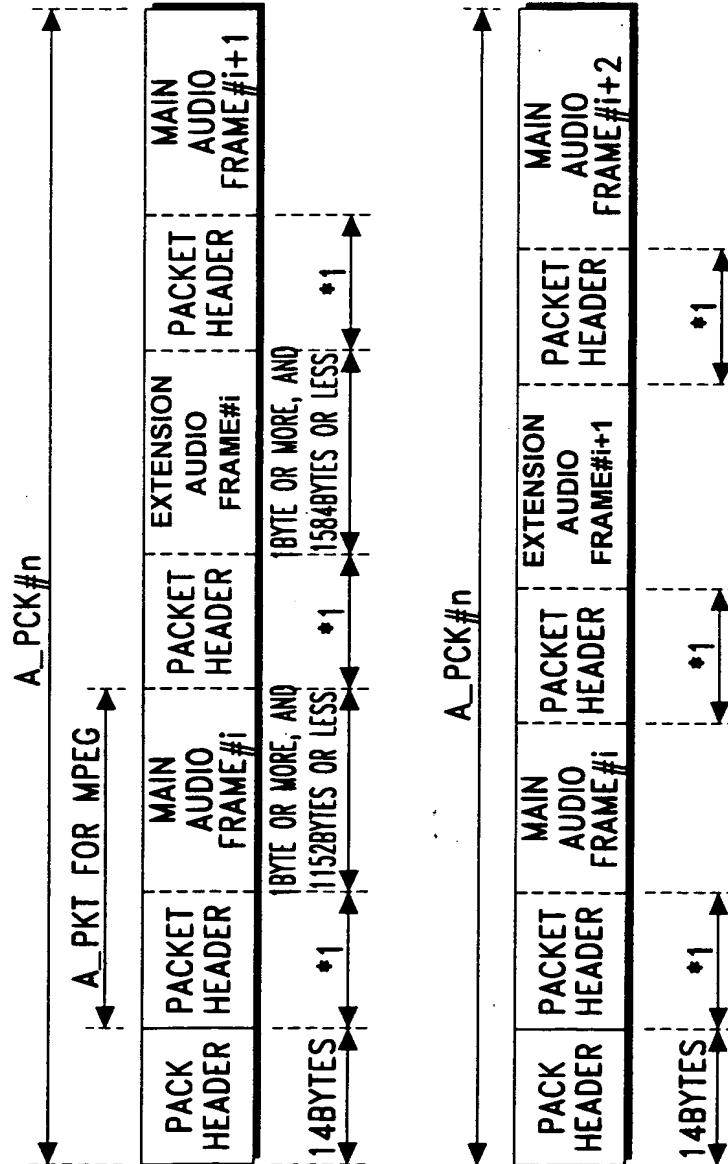


FIG. 21D

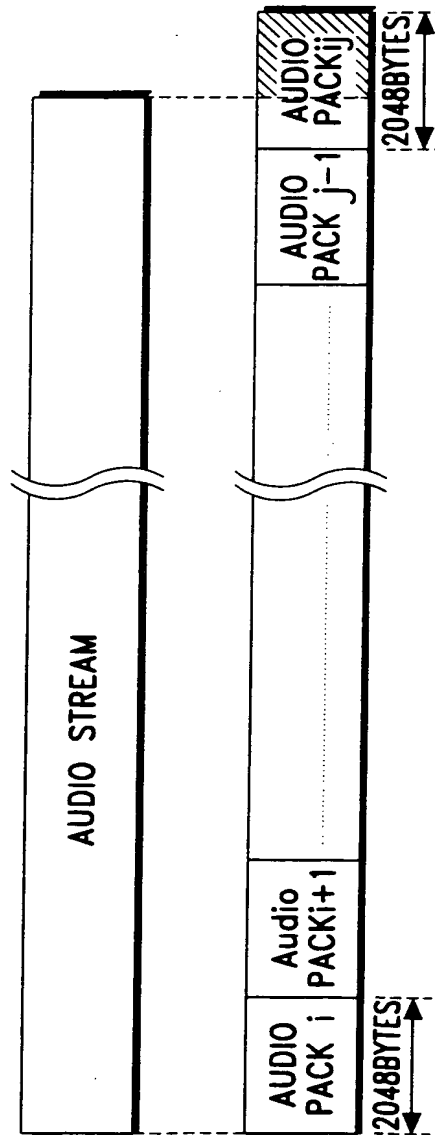


FIG. 22



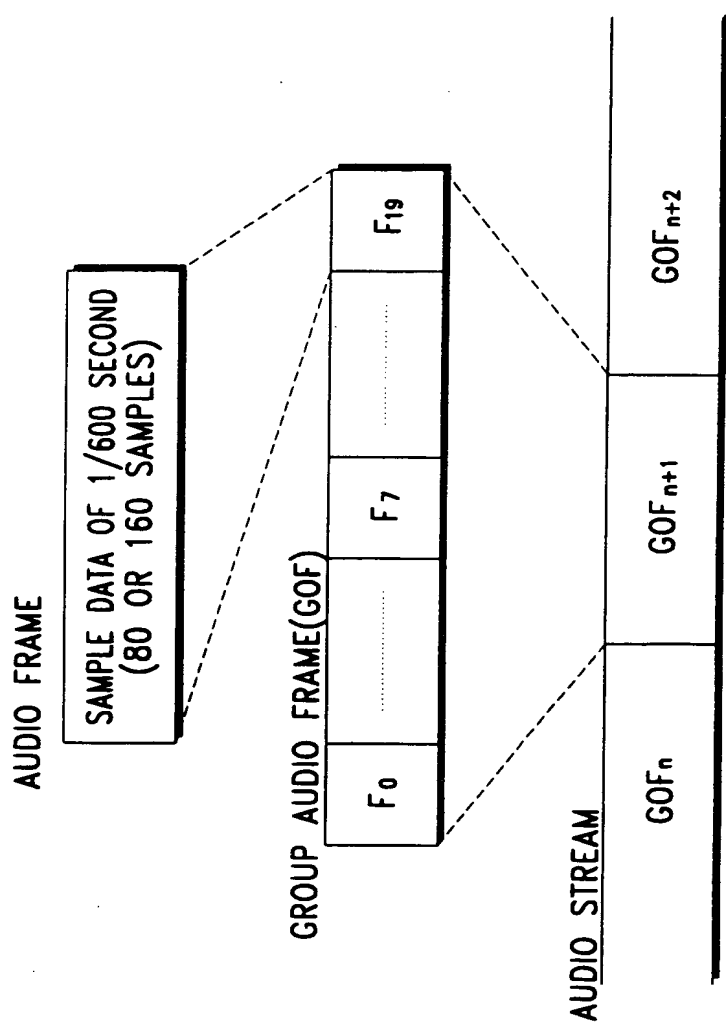


FIG. 23

## 16BITS MODE

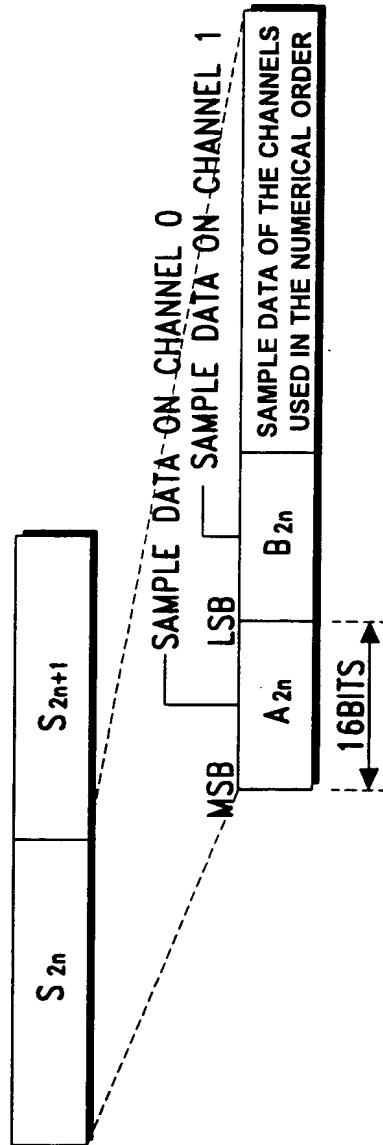


FIG. 24A

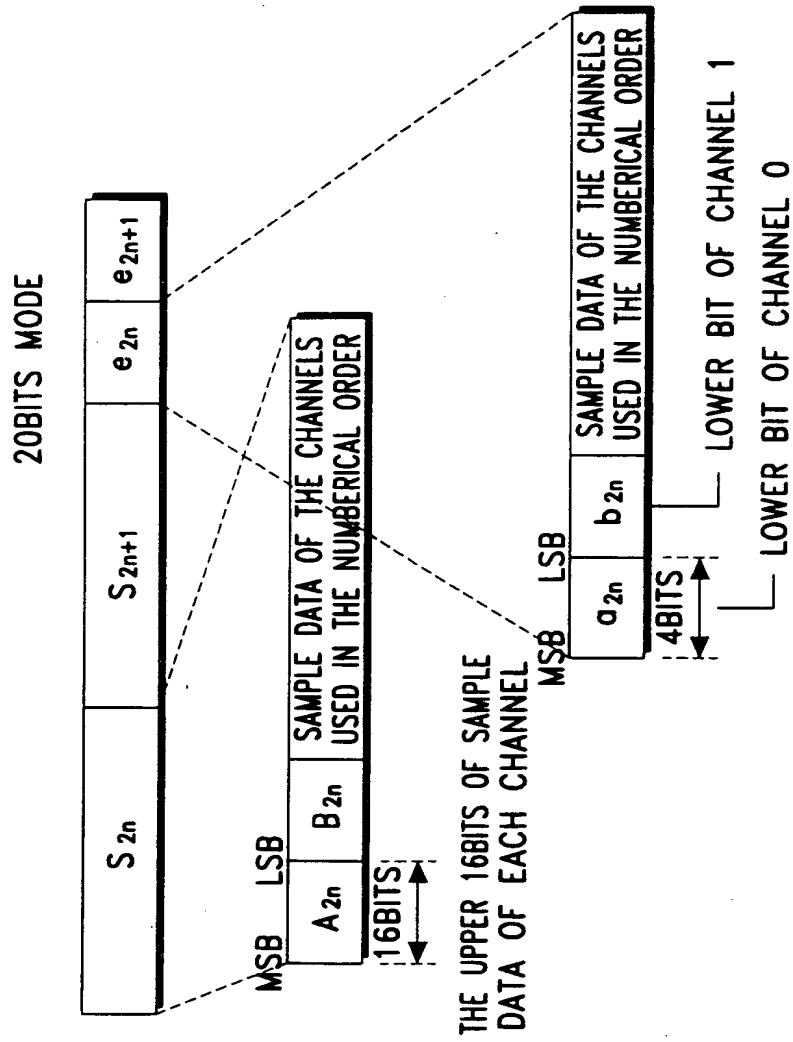
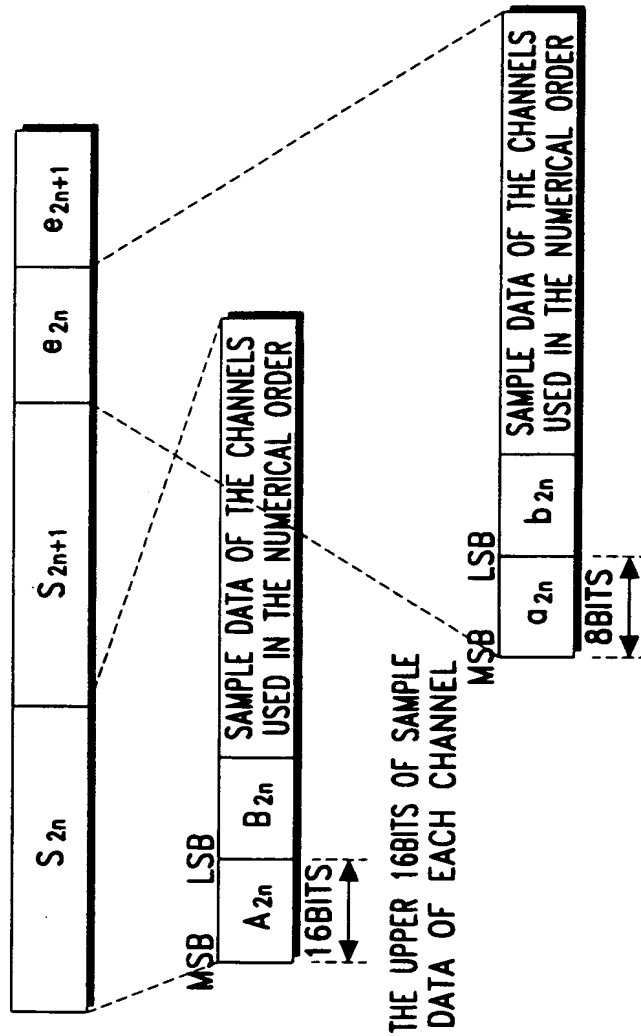


FIG. 24B

24BITS MODE



THE LOWER 8BITS OF SAMPLE DATA EACH CHANNEL

FIG. 24C

AUDIO PACK(LINEAR PCM)

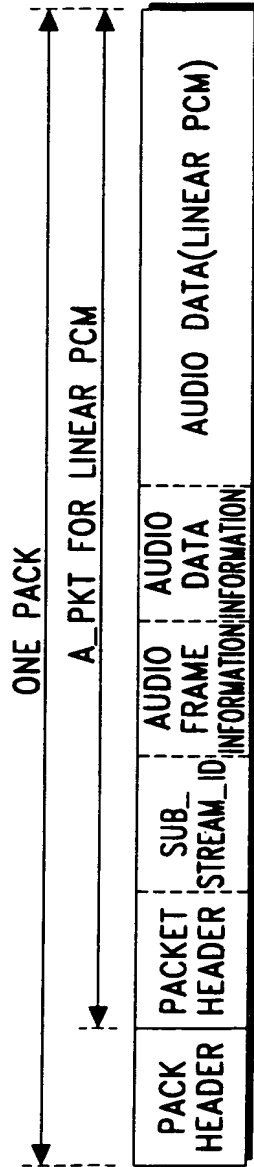


FIG. 25

AUDIO PACK(CODED DATA)

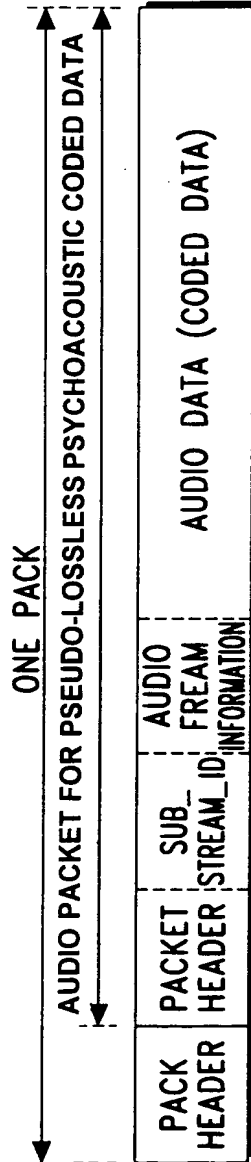


FIG. 26

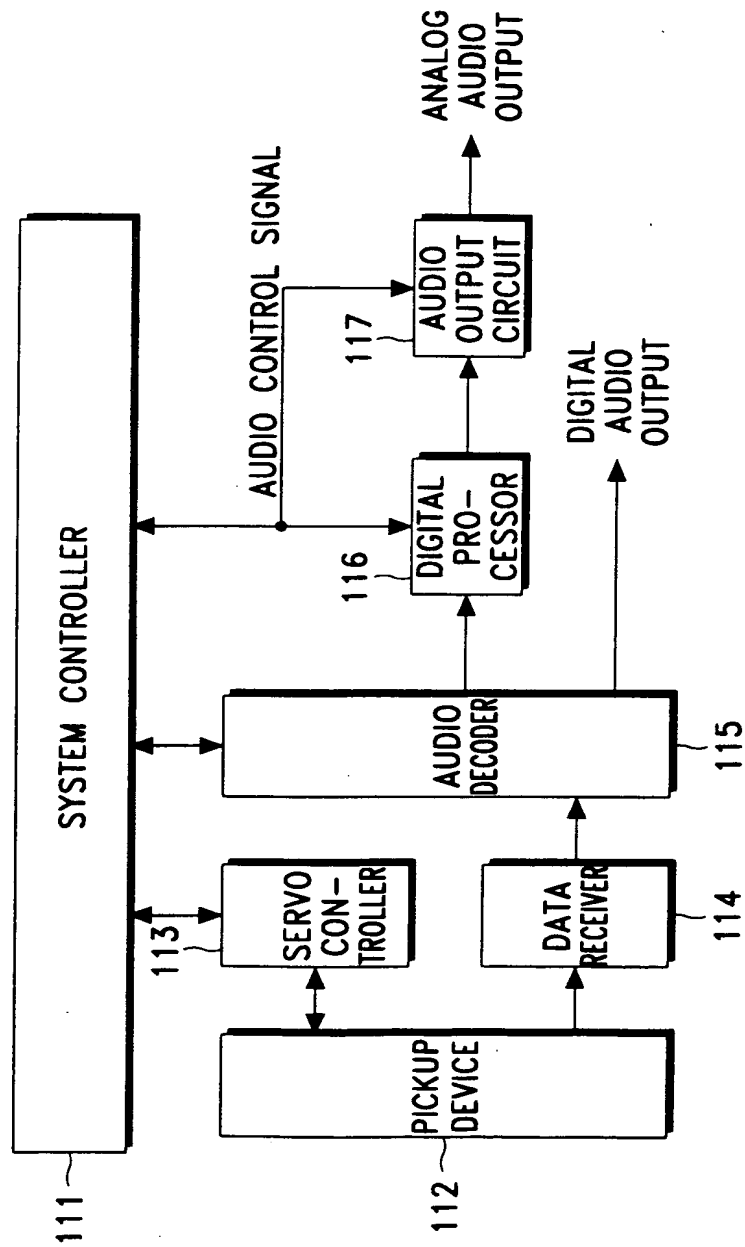


FIG. 27

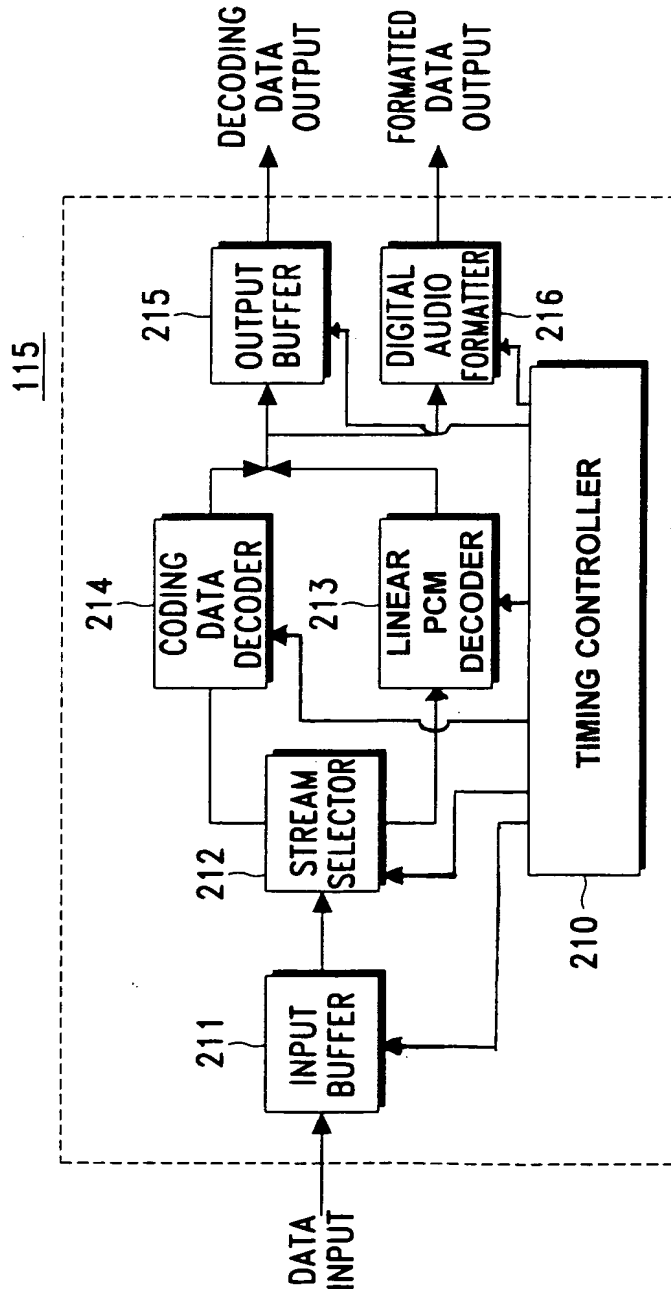


FIG. 28



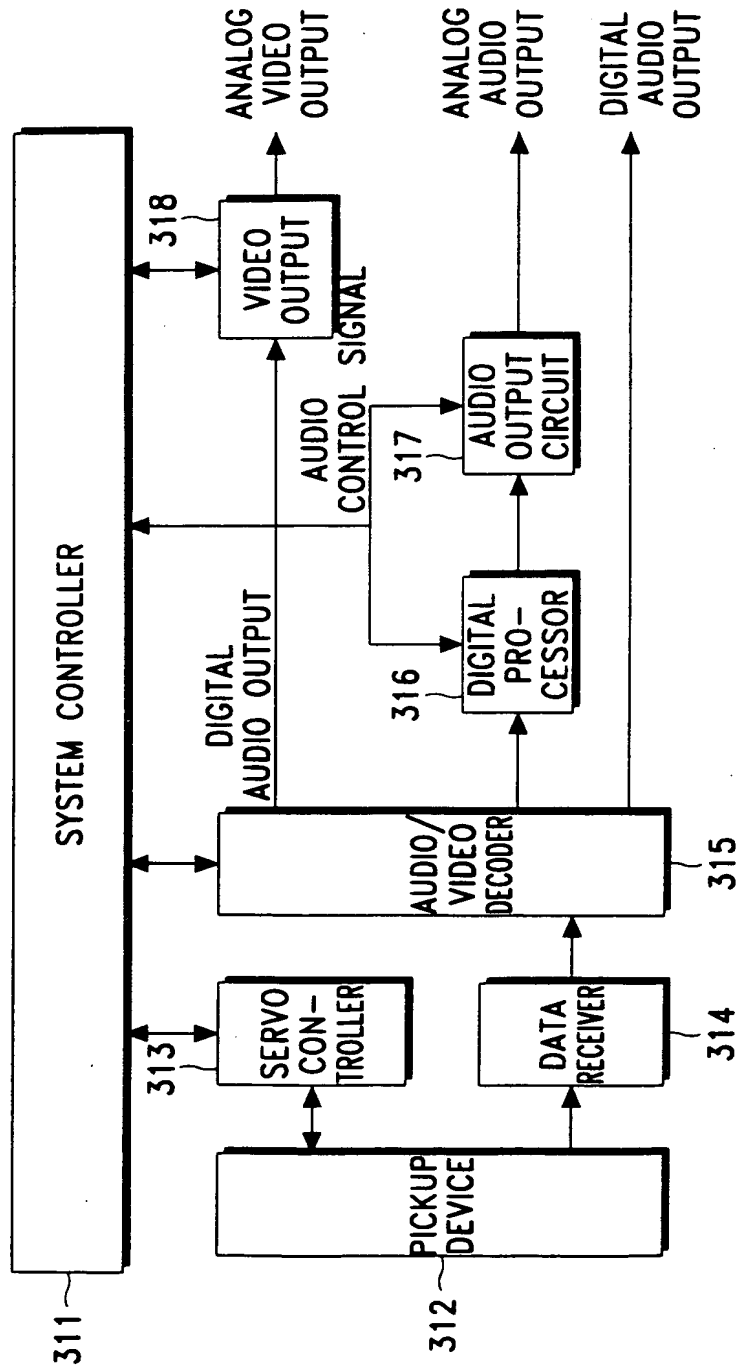


FIG. 29

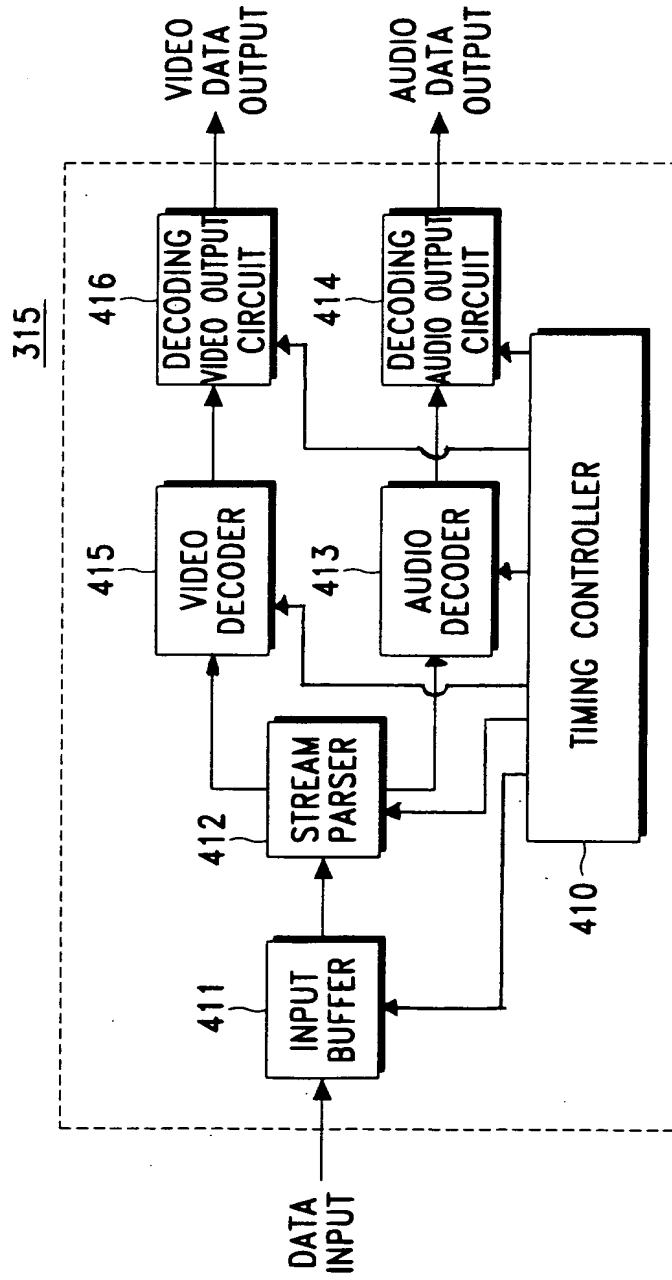


FIG. 30

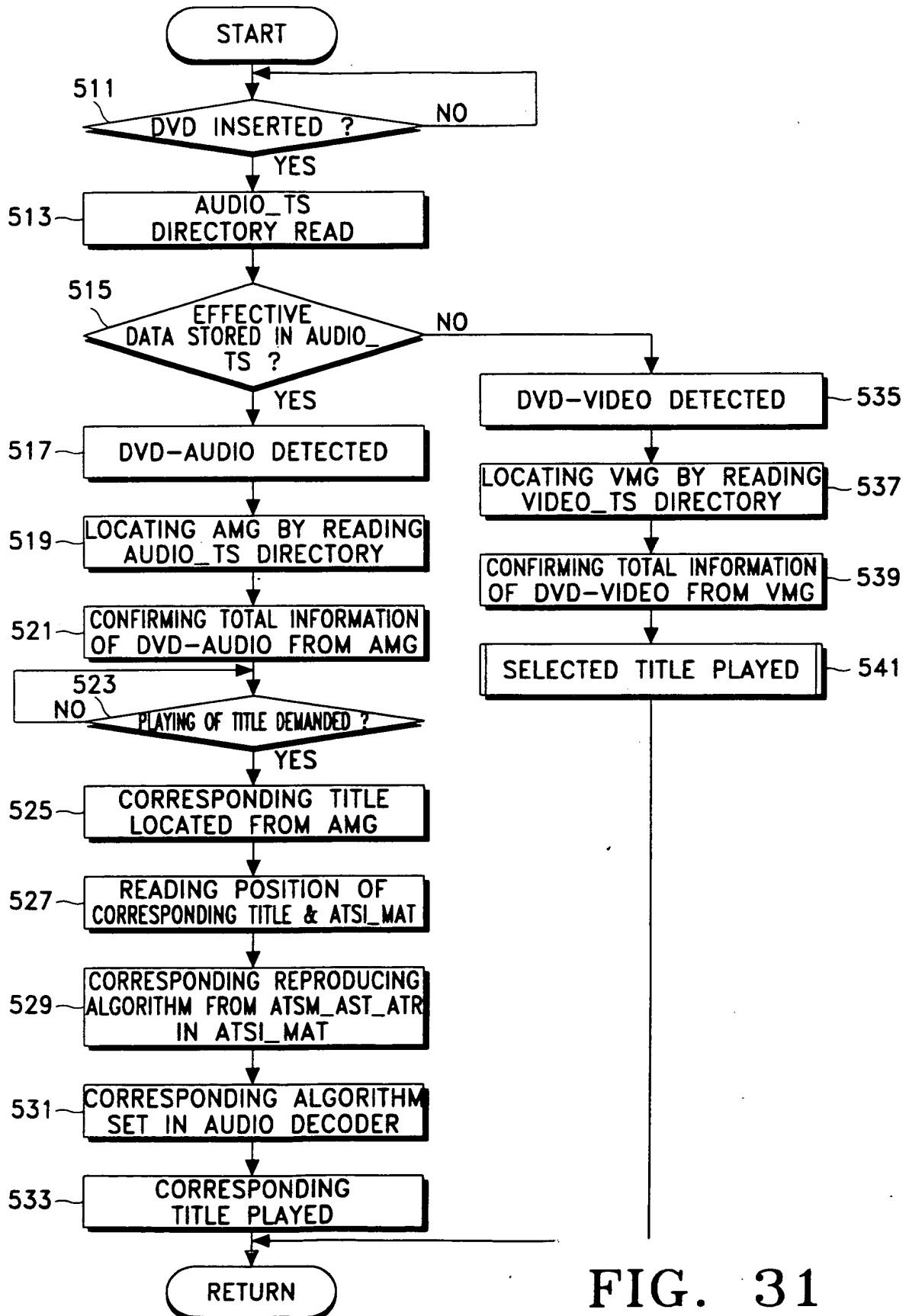


FIG. 31

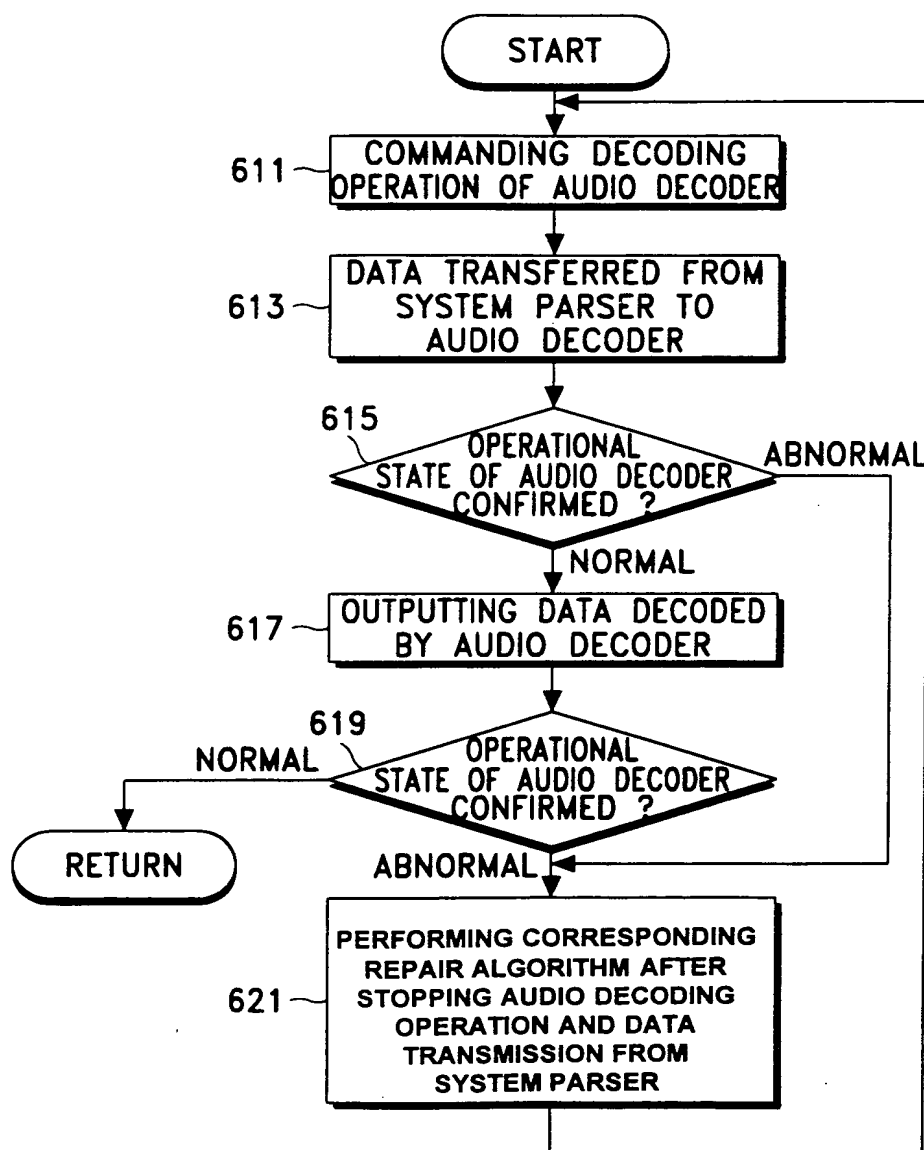


FIG. 32

FIG. 33

